

the relative humidity rose rapidly from 63 to 98. The barograph recorded an abrupt rise in pressure from 29.55 inches to 29.63 inches, and continued to rise uniformly thereafter, attaining a pressure of 29.80 inches at 8:00 a. m., July 7. In the midst of the heaviest rainfall the wind attained a maximum velocity of 40 miles per hour at 4:50 p. m., at which time the wind backed from southwest to southeast, indicating that the center of the storm had passed probably on the south, since the squall wind usually blows out from the region of heaviest rainfall. Three minutes later, the wind veered to northwest from which direction it continued to blow for several hours after normal conditions were again restored. The rainfall during the first 17 minutes was 1.03 inches, of which 0.77 inch fell between 4:45 and 4:55 p. m. The rain continued till 5:30, giving a total of 1.24 inches for the storm. Other thunderstorms occurred in eastern Pennsylvania, New Jersey, and New York, but no rain fell at Baltimore or Washington.

The surface wind July 7 at 7:00 a. m. was north and at 1,100 meters northeast; conditions associated with an extensive HIGH over the Great Lakes.

#### PRELIMINARY MEETING OF OFFICIAL WEATHER BUREAU DIRECTORS AT LONDON, JULY 3-9, 1919.

By Dr. L. A. BAUER.

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[Dated Sept. 1, 1919.]

At the call of Sir Napier Shaw, the president of the prewar International Meteorological Committee, there was recently held in the Meteorological Office, London, from July 3-9, a preliminary meeting of such of the official weather bureau directors who could attend at short notice and who represented the allied and neutral countries. The prime purpose of the meeting was to reach some preliminary agreements, in advance of the proposed Paris Meteorological Conference meeting at the end of September, regarding official meteorological matters and interchange of data.

There were present Sir Napier Shaw, chairman, A. Angot (France), Lieut. Col. E. Gold, of the Meteorological Office, who served as secretary, E. Van Everdingen (Holland), Lieut. H. D. Grant (British Admiralty Meteorological Office), Th. Hesselberg (Norway), L. Palazzo (Italy), Capt. C. Ryder (Denmark), G. T. Walker (India), A. Wallén (Sweden), and L. A. Bauer, representing C. F. Marvin (United States).

The signal success of the meeting was due chiefly to Sir Napier, under whose tactful and skillful management decisions on many matters were put in form for submission to the coming Meteorological Conference at Paris. Entire harmony prevailed throughout the deliberations, the representatives of the various countries having free and cordial intercourse with one another.

Among the pleasant social events may be mentioned the visit to the Kew Observatory on the afternoon of July 3, and reception in the evening at the Meteorological Office; dinner tendered by the Meteorological Office at Bailey's Hotel, July 7; visit to W. H. Dines' observatory at Benson, July 8.

#### MEETING OF INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS AT BRUSSELS, JULY 18-28, 1919.\*

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[Dated Washington, Sept. 1, 1919.]

Under the auspices of the International Research Council there was established at Brussels, during the meeting of the Council in the Palais des Academies, July 18-28, 1919, various unions on Astronomy, Mathematics, Physics, Chemistry, Geodesy and Geophysics, and Scientific Radiotelegraphy.

The various countries, formerly at war with the Central Powers, were, in general, fully represented by officially appointed delegates. At the last session of the Council a resolution was passed respecting the entrance of other countries and the invitations to be extended to them.

The International Union of Geodesy and Geophysics, as finally established for a period of 12 years beginning on January 1, 1920, consists of the following sections:

(a) *Geodesy*: William Bowie (United States), president; Vincenzo Reina (Italy), vice president; Lieut. Col. Perrier (France), secretary and director of Central Bureau.

(b) *Seismology*: Owing to continuation of present agreement among countries with regard to the International Seismological Association, which is to continue for some time longer, it was not possible to organize this section definitely.

(c) *Meteorology*: Sir Napier Shaw, president; A. Angot, vice president; C. F. Marvin, secretary and director of Central Bureau.

(d) *Terrestrial Magnetism and Electricity*: A. Tanakadate (Japan), president; C. Chree (England), vice president; L. A. Bauer (United States), secretary and director of Central Bureau.

(e) *Physical Geography*: Naming of president deferred until entrance of neutral countries; H. Lamb (England), vice president; G. P. Magrini (Italy), secretary and director of Central Bureau; Sir Charles Close (England), and Mr. G. W. Littlehales (United States) were made members of the executive committee, in addition to president, vice president, and secretary.

(f) *Volcanology*: Prof. A. Riccò (Italy), president; H. S. Washington (United States), vice president; Dr. A. Malladra (Italy), secretary and director of Central Bureau.

The following officers of the Union were chosen: Charles Lallemand (France), president; Col. H. G. Lyons (England), general secretary; the presidents of the various sections are the vice presidents of the Union.

The opinion was expressed generally that in the organization of work for the various sections the endeavor should be to distribute the work among various committees rather than centralize the investigational work at the Central Bureaus.

At a preliminary meeting of the section on Meteorology, under the chairmanship of Col. Lyons, in the absence of Sir Napier Shaw, a brief discussion was held with regard to the work of the section. The general opinion was that

\* A more detailed account is published in *Nature* (London), Aug. 14, 1919, pp. 464-468 (summarized in *Science*, Sept. 5, 1919, p. 226). A full account of the organization of the American section of this International Union of Geodesy and Geophysics is given in *Science*, Sept. 5, and 12, 1919, pp. 233-238, 255-259.